



October 5, 2016

Mr. Gary Greulich  
New Jersey Department of Environmental Protection  
Northern Regional Office  
7 Ridgedale Avenue  
Cedar Knolls, NJ 07927

RE: Remedial Action Progress Report No. 21 for the Industrial #2 Redevelopment Area Portion of the Former General Motors (GM) Linden Assembly Plant, 1016 West Edgar Road, Linden, Union County, New Jersey 07036; DUK059.701.0218.

Dear Mr. Greulich:

On June 3, 2011, the New Jersey Department of Environmental Protection (NJDEP) approved the New Jersey Remedial Action Work Plan and RCRA Corrective Measures Proposal Addendum No. 4 (RAWP) for the Industrial #2 Redevelopment Area of the Former GM Linden Assembly Plant (Site; SRP PI# 621084; Case Tracking Number: E20040531-Industrial). The June 3, 2011 approval letter requested a Remedial Action Progress Report for the Industrial #2 Redevelopment Area on/by September 30, 2011. Subsequent reports will be submitted on a quarterly basis.

As discussed during extensive correspondence with NJDEP, the industrial portion of the Former GM Plant, which includes the Industrial #1 and Industrial #2 Redevelopment Areas, was sold in late-2013 by Linden Development LLC to Duke Linden LLC (Duke Linden). Duke Realty Corporation is a primary member of both the former owner (Linden Development LLC) and new owner (Duke Linden) and will provide for consistent implementation of the previously-approved remedial strategy outlined in RAWP Addendum No. 4. The project team has remained unchanged since the last progress report.

As part of the property transaction, NJDEP assigned the following updated identification numbers for the industrial portion of the Former GM Plant which includes the Industrial #2 Redevelopment Area:

- Program Interest Number: 621084
- Case Tracking Number: E20040531-Industrial

This letter constitutes Remedial Action Progress Report No. 21 for the Industrial #2 Redevelopment Area. Hull & Associates, Inc. (Hull) has prepared this report on behalf of Duke Linden to summarize remedial activities completed on the Site between July 1, 2016 and September 30, 2016.

Requirements, according to N.J.A.C. 7:26E-6.6, are shown below in ***bold italics***, with Hull/Duke Linden's update following. The report certification required by N.J.A.C. 7:26E-1.5 is included in Attachment A.

1. ***NJDEP requires a description of each planned remedial action***
  - i. ***Scheduled to be initiated or completed within the reporting period;***
  - ii. ***Actually initiated or completed during the reporting period; and***
  - iii. ***Scheduled but not initiated or not completed during the reporting period, including the reasons for the noncompliance with the approved schedule.***



#### Soil

As outlined in the approved RAWP, the remedial activities for soils on the Industrial #2 Redevelopment Area consist of the following:

- a. Excavation of approximately 1,715 yd<sup>3</sup> of soil containing chemicals of potential concern (COPCs) at concentrations above applicable standards from AOI-7;
- b. Establishing deed restrictions or environmental covenants to maintain commercial/industrial land use at the Site;
- c. Regrading the site to achieve the grade necessary to support the proposed redevelopment;
- d. Constructing building slabs, parking areas and roadways and placing one foot of clean soil over geotextile fabric in future greenspaces to preclude direct contact exposures to future receptor populations and/or provide cover to historical fill material; and
- e. Surveying to demonstrate that all areas are covered with engineering controls (e.g., building slabs, parking areas and roadways) or one foot of clean soil.

The excavation activities within AOI-7 were completed in March and April 2012. A summary of the excavation activities, confirmatory sampling results, soil disposal and other details were provided in Quarterly Progress Report No. 4, dated June 30, 2012. As discussed in that report, the confirmatory sampling results indicate that the AOI-7 excavation activities successfully removed the petroleum-impacted soils and achieved the cleanup goals specified in the approved RAWP.

During the current reporting period Building 11 construction activities were substantially completed by Duke. Building 11 was turned over to the tenant on June 1 by Duke Linden, LLC. The tenant is making modifications that will temporarily affect portions of interior and exterior engineering controls (hardscape surfaces and clean cover greenspace area) during their build-out of the structure. Tenant modifications will include lowering portions of the interior concrete floor slab, strengthening roof truss supports, interior build-out, and expanding sub-surface utilities.

#### ***Fill Material Import***

As discussed in previous reports, Duke has imported structural fill material from off-site sources for No imported structural fill material or clean cap material from off-site sources were imported during the current reporting period.

#### Groundwater

On August 25, 2015, Duke, Hull and JM Sorge met with the NJDEP Case Manager to discuss establishing Classification Exception Areas (CEA) for the Retail and Industrial portions of the site. The groundwater impacts associated with the disputed groundwater area are associated with off-site sources. Based on the meeting, a groundwater permit and CEA will be established for the overburden groundwater zones over a portion of the Industrial #1 and #2 Development Areas in the AOI-6 area. Additional quarterly groundwater sampling has been conducted to support the monitored natural attenuation remedy. During the current reporting period, monitoring wells MW-18S, MW-21RS, MW-22S, MW-25RS, MW-39S, MW-50RS, MW-96S, BEC-9D, MW-35D, MW-91D, MW-92D, MW-93D, MW-95D, and MW-96D were sampled on August 22 and 23, 2016.

Tabulated groundwater analytical results along with the laboratory analytical reports for the August sampling event were previously provided in Remedial Action Progress Report No. 28 for the Industrial #1 Redevelopment Area.

2. ***NJDEP requires discussion of problems and delays in the implementation of the RAWP, which should include proposals for corrections.***

Duke substantially completed construction of Building 11 during the current reporting period. The Building 11 area occupies the Industrial # 2 Redevelopment Area and a portion of the Industrial #1 Redevelopment Area abutting the Building 12 footprint. Upon completion of Building 11 and planned modifications from the tenant, the relied-upon engineering controls (e.g., building slabs, asphalt cover, etc.) in the RAWP will have been implemented to eliminate exposure of Site receptors to potential contaminants in Site soils.

3. ***NJDEP requires proposals for a deviation from, or modification to, the approved RAWP.***

No deviations from, or modifications to, the approved RAWP are planned or required at this time.

4. ***NJDEP requires submittal of a revised schedule pursuant to N.J.A.C. 7:26E-6.5, to reflect the changes as noted in 1 through 3 above.***

A revised schedule showing the tenant's anticipated construction schedule for Building 11 modifications and build-out was previously provided in Remedial Action Progress Report No. 28 for the Industrial #1 Redevelopment Area.

5. ***NJDEP requires an updated status of all permit applications relative to the critical path schedule.***

The permits required for initiation of the remedial activities are summarized below.

Permit/Approval Type	Status	Notes
Planning Board Approval	Approved 11/17/08	Site plan approved by City of Linden Planning Board
NPDES Permit (Storm Water)	Approved 9/16/09	NPDES Permit No. 0088323
Soil Conservation District	Approved 9/16/09	Approved by Somerset-Union Conservation District
Building Permit for Building 11	Approved 9/24/15	

6. ***NJDEP requires a listing of each remedial action to be performed during the next reporting period.***

Duke completed construction activities related to Building 11 during this reporting period and turned the building over to a tenant. The tenant is making modifications that will temporarily affect portions of interior and exterior engineering controls (hardscape surfaces and clean cover greenspace area) during their build-out of the structure. Tenant modifications begun during the current reporting period and are now anticipated to be completed by the first quarter of 2017. Building modifications include lowering portions of the interior concrete floor slab, strengthening roof truss supports, interior build-out, and expanding sub-surface utilities. Upon completion of tenant modifications, the Building 11 Soil RAR will be submitted to NJDEP.

7. ***NJDEP requires costs of each remedial action***  
i. ***Annual summary of all remedial action costs incurred to date; and***  
ii. ***Revised cost estimate for remedial actions remaining to be performed.***

Given that significant construction and remedial implementation has not yet commenced, no significant remedial costs have been accrued in Industrial No. 2, with the exception of costs for the storm sewer cleaning (i.e., approximately \$7,000) and the previously completed AOI-7 excavation project. The costs for the AOI-7 activities totaled approximately \$240,000 at project completion, which is below the amount used in the current remediation cost estimate.

The overall cost estimate for completing remedial activities remains consistent with that presented in the RAWP (i.e., approximately \$11,900,000 for earthwork and construction of engineering controls).

8. ***NJDEP requires a tabulation of sampling results [according to N.J.A.C. 7:26E-3.13(c)(3)] received during the reporting period and a summary of the data and any conclusions, presented in a format consistent with N.J.A.C. 7:26E-4.8.***

No soil sampling results were received during the reporting period. A groundwater sampling event was conducted on August 22 and 23, 2016. Groundwater-related sampling results previously provided in Remedial Action Progress Report No. 28 for the Industrial #1 Redevelopment Area.

9. ***NJDEP requires a summary of active groundwater remedial actions.***  
i. ***Groundwater elevation maps with groundwater flow shown immediately before and during active groundwater remediation;***  
ii. ***Graphs depicting changes in concentrations over time for all impacted wells as well as all down-gradient wells;***  
iii. ***Summary of volume of water treated since last reporting period and the total volume treated since active remedial action commenced; and***  
iv. ***Summary of groundwater contamination, indicating either that contamination remains above applicable standards (include a proposal detailing additional remedial actions) or that concentrations are below applicable standards.***

The RAWP for the Industrial #2 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

10. ***NJDEP requires a summary of natural remediation groundwater remedial actions.***  
i. ***Summary table of the groundwater monitoring results collected; and***  
ii. ***Conclusions whether data indicate that natural remediation is no longer appropriate (must then also submit a revised RAWP).***

The RAWP for the Industrial #2 Redevelopment Area was limited to soils only. Therefore, this section is not applicable.

11. ***NJDEP requires a description of all wastes generated as a result of the remedial action.***  
i. ***Tabulation of waste characterization samples collected, including the physical state of the material, volume, number of samples, analyses performed and results;***  
ii. ***Listing of types and quantities of waste generated by the remedial action during the reporting period as well as to date;***  
iii. ***Name of the disposal facility used;***  
iv. ***Transporters' dates of disposal; and***  
v. ***Manifest numbers of each waste shipment.***

Investigative derived waste (IDW) from the 2016 groundwater sampling events and well decommissioning activities was generated and waste characterization samples collected. The results of the waste characterization samples of the IDW generated during the May and June 2016 sampling event and well decommissioning activities were previously provided in Progress Report #27 and #28 for the Industrial #1 Redevelopment Area. The waste characterization results from the August sampling event are presented in Attachment B. The non-hazardous drums were removed from Site on September 23, 2016 by AWT Environmental Services, Inc. At the time of this report, copies of the disposal manifests were unavailable. Disposal documentation will be provided in the next quarterly progress report.

12. ***NJDEP requires that any additional support documentation that is available also be provided (photos, etc.).***

Photographs showing Building 11 tenant modification construction activities are included in Attachment C.

The next scheduled remedial action progress report will include remedial actions completed between October 1, 2016 and December 31, 2016. Please feel free to contact Raymond Kennedy at (614) 793-8777 with any questions regarding the update provided herein.

Sincerely,



Raymond Kennedy  
Senior Project Manager

Attachments

ct: Clifford Ng – U.S. EPA Region 2  
David Jennings – Duke Linden LLC  
Joseph M. Sorge – J.M. Sorge, Inc.

## **ATTACHMENT A**

### **Report Certification**

**Certification**

**Duke Linden, LLC  
ISRA Case Number E20040531-Industrial**

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Duke Linden, LLC, a Delaware limited liability company

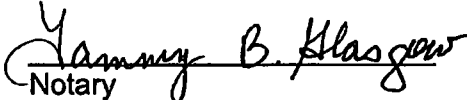
By: Duke Realty Limited Partnership, an Indiana limited partnership, its sole member

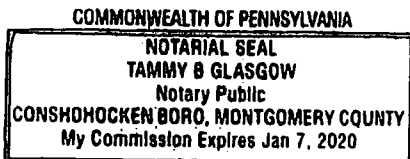
By: Duke Realty Corporation, an Indiana corporation, sole general partner

Date: 10/7/16

By:   
John Van Vliet  
Vice President, Construction

Sworn to and subscribed to before me on this 7<sup>th</sup> day of October, 2016

  
Notary



## **ATTACHMENT B**

### **Waste Characterization Analytical Results**



Waste Characterization Results  
August 2016 Purge Water

## SUMMARY OF ANALYTICAL RESULTS: 460-119091-1

Job Description: Duke Linden NJ August 2016

For:

Former GM Linden Site

1016 W. Edgar Road

Linden, NJ

Client ID	NJ Higher of	DUK059:WC-W1:W082416		
Lab Sample ID	PQLs and GW	460-119091-1		
Sampling Date	Quality	08/24/2016 12:45:00		
Matrix	Criterion	Water		
Dilution Factor	2015	1		
Unit	ug/l	ug/l		
VOA-8260C-WATER		Result	Q	MDL
WATER BY 8260C				
1,1,1-Trichloroethane	30	0.28	U	0.28
1,1,2,2-Tetrachloroethane	1	0.19	U	0.19
1,1,2-Trichloroethane	3	0.08	U	0.08
1,1-Dichloroethane	50	0.24	U	0.24
1,1-Dichloroethene	1	0.34	U	0.34
1,2,4-Trichlorobenzene	9	0.27	U	0.27
1,2-Dibromo-3-Chloropropane	0.02	0.23	U	0.23
1,2-Dibromoethane	0.03	0.19	U	0.19
1,2-Dichlorobenzene	600	0.91	J	0.22
1,2-Dichloroethane	2	1		0.25
1,2-Dichloropropane	1	0.18	U	0.18
1,3-Dichlorobenzene	600	0.33	U	0.33
1,4-Dichlorobenzene	75	0.33	U	0.33
2-Butanone	300	3.2	J	2.2
2-Hexanone	300	0.72	U	0.72
4-Methyl-2-pentanone	NA	5.8		0.63
Acetone	6000	28		1.1
Benzene	1	0.29	J	0.09
Bromodichloromethane	1	0.15	U	0.15
Bromoform	4	0.18	U	0.18
Bromomethane	10	0.18	U	0.18
Carbon disulfide	700	0.22	U	0.22
Carbon tetrachloride	1	0.33	U	0.33
Chlorobenzene	50	0.24	U	0.24
Chloroethane	5	0.37	U	0.37
Chloroform	70	0.85	J	0.22
Chloromethane	NA	0.22	U	0.22
cis-1,2-Dichloroethene	70	1.6		0.26
cis-1,3-Dichloropropene	NA	0.16	U	0.16
Cyclohexane	NA	1.2		0.26
Dibromochloromethane	1	0.22	U	0.22
Dichlorodifluoromethane	1000	0.14	U	0.14
Ethylbenzene	700	0.83	J	0.3
Freon TF	20000	0.34	U	0.34
Isopropylbenzene	700	0.33	J	0.32
Methyl acetate	7000	0.58	U	0.58
Methylcyclohexane	NA	0.47	J	0.22
Methylene Chloride	3	0.49	J	0.21
MTBE	70	0.13	U	0.13
Styrene	100	0.17	U	0.17
Tetrachloroethene	1	1.4		0.12
Toluene	600	0.58	J	0.25
trans-1,2-Dichloroethene	100	0.44	J	0.18
trans-1,3-Dichloropropene	NA	0.19	U	0.19
Trichloroethene	1	4.7		0.22
Trichlorofluoromethane	2000	0.15	U	0.15
Vinyl chloride	1	0.33	J	0.06
Xylenes, Total	1000	5.4		0.28
Total Conc	NA	57.82		

Highlighted Concentrations shown in bold type face exceed limits

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approx. value.

U : Indicates the analyte was analyzed for but not detected.

X : Surrogate is outside control limits

## **ATTACHMENT C**

### **Site Photographs**

